



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>7</sup> :</b> A61K 51/00, 49/00, A01N 63/00, C12Q 1/68, C12N 15/85, 15/63, C07H 21/04	<b>A1</b>	<b>(11) International Publication Number:</b> WO 00/66182 <b>(43) International Publication Date:</b> 9 November 2000 (09.11.00)
<b>(21) International Application Number:</b> PCT/US00/11485 <b>(22) International Filing Date:</b> 28 April 2000 (28.04.00)  <b>(30) Priority Data:</b> 09/302,456 29 April 1999 (29.04.99) US  <b>(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application</b> US 09/302,456 (CIP) Filed on 29 April 1999 (29.04.99)  <b>(71) Applicant (for all designated States except US):</b> VANDERBILT UNIVERSITY [US/US]; Office of Technology Transfer, Suite 210, 1207 17th Avenue South, Nashville, TN 37212 (US).  <b>(72) Inventor; and</b> <b>(75) Inventor/Applicant (for US only):</b> HALLAHAN, Dennis, E. [US/US]; 4214 Estes Road, Nashville, TN 37215 (US).  <b>(74) Agent:</b> TAYLOR, Arles, A., Jr.; Jenkins & Wilson, P.A., University Tower, Suite 1400, 3100 Tower Boulevard, Durham, NC 27707 (US).		<b>(81) Designated States:</b> AU, CA, JP, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
<b>(54) Title:</b> X-RAY GUIDED DRUG DELIVERY  <b>(57) Abstract</b>  A method of delivering an active agent to a target tissue, particularly neoplastic tissue, vascular anomaly or tumor tissue, in a vertebrate subject. The method includes the steps of exposing the target tissue to ionizing radiation; and administering a delivery vehicle to the vertebrate subject before, after, during, or combinations thereof, exposing the target tissue to the ionizing radiation. The delivery vehicle includes the active agent and delivers the agent to the target tissue. Representative delivery vehicles include platelets; leukocytes; proteins or peptides which bind activated platelets; antibodies which bind activated platelets; microspheres coated with proteins or peptides which bind activated platelets; liposomes conjugated to proteins or peptides, platelets, or leukocytes which bind activated platelets, or antibodies which bind activated platelets; and combinations thereof.		